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Hao-hua Chu

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EXAMINER

RIES, LAURIE ANNE

ART UNIT

PAPER NUMBER

2176

DATE MAILED: 08/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/967,167	Applicant(s) CHU ET AL.	
	Examiner Laurie Ries	Art Unit 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/7/2002</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 8-10, 21, 23, and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wei (U.S. Publication 2003/0200254 A1) in further view of Ikemoto (U.S. Patent 5,969,717).

As per claim 1, Wei discloses a system and method of dynamically adapting a presentation generated by a scalable application, such as Java, to a display of any of a plurality of heterogeneous device platforms which includes providing a number of graphical user interface (GUI) components in a hierarchical configuration. (See Wei, Figure 9). Wei does not disclose expressly that the graphical user interface components are arranged on a page as a function of the hierarchy, or that the graphical user interface components are selectively transformed to adjust the size of the page to maximize the fill of a display screen of one of the heterogeneous device platforms on which the scalable application is operating. Ikemoto discloses arranging the graphical user interface components on a page as a function of a hierarchical configuration. (See Ikemoto, Column 10, lines 12-16, Column 9, lines 58-62, and Figure 15A). Ikemoto also discloses that the graphical user interface components are transformed to adjust to the

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size of the page of the display device. (See Ikemoto, Column 11, lines 14-33). Wei and Ikemoto are analogous art because they are from the same field of endeavor of creating graphical user interfaces. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the arrangement and transformation of graphical user interface components of Ikemoto with the method of adapting a presentation to heterogeneous device platforms of Wei. The motivation for doing so would have been to allow the user the ability to design and create a graphical user interface easily. (See Ikemoto, Column 2, lines 3-5). Therefore, it would have been obvious to combine Ikemoto with Wei for the benefit of easily designing and creating a graphical user interface to obtain the invention as specified in claim 1.

As per claim 2, Wei and Ikemoto disclose the limitations of claim 1 as described above. Ikemoto also discloses identifying the hierarchical level of the graphical user interface, which includes the lowest and highest in the given list, (See Ikemoto, Column 9, lines 58-62), and the degree of importance of the graphical user interface components (See Ikemoto, Column 14, lines 48-54). Wei and Ikemoto are analogous art because they are from the same field of endeavor of creating graphical user interfaces. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the identification of the graphical user interface components by hierarchical level and layout priority of Ikemoto with the system and method of adapting a presentation to heterogeneous device platforms of Wei and Ikemoto. The motivation for doing so would have been to determine candidates for the graphical user interface components to be displayed. (See Ikemoto, Column 14, lines

39-43). Therefore, it would have been obvious to combine Ikemoto with Wei for the benefit of deciding which graphical user interface components to be displayed to obtain the invention as specified in claim 2.

As per claim 8, Wei and Ikemoto disclose the limitations of claim 1 as described above. Ikemoto also discloses arranging the graphical user interface components as a function of properties specified by the scalable application. (See Ikemoto, Column 8, lines 13-24). Wei and Ikemoto are analogous art because they are from the same field of endeavor of creating graphical user interfaces. At the time of the invention it would have been obvious to a person of ordinary skill in the art to combine the arrangement of graphical user interface components as a function of properties specified by the application of Ikemoto with the system and method of adapting a presentation to heterogeneous device platforms of Wei and Ikemoto. The motivation for doing so would have been to determine the selection of graphical user interface components for each data item. (See Ikemoto, Column 8, lines 30-33). Therefore, it would have been obvious to combine Ikemoto with Wei for the benefit of determining the selection of graphical user interface components to obtain the invention as specified in claim 8.

As per claim 9, Wei and Ikemoto disclose the limitations of claim 1 as described above. Wei also discloses generating a set of proposed pages based on client type, or device platform (See Wei, Page 21, paragraph 0259), and including selecting at least one device platform specific page from the set to display the graphical user interface components with the display screen. (See Wei, Page 2, paragraph 0012).

As per claim 10, Wei and Ikemoto disclose the limitations of claim 9 as described above. Wei also discloses sizing each of the proposed device platform or client type specific pages as a function of the graphical user interface components arranged to form each of the proposed device platform or client type specific pages. (See Wei, Page 12, paragraph 0219, "onresize" event).

Claim 21 is rejected on the same basis as claims 1 and 2.

Claim 23 is rejected on the same basis as claim 1.

As per claim 29, Wei and Ikemoto disclose the limitations of claim 21 as described above. Wei also discloses that the target device platform includes a personal digital assistant, which is one of the possible device platforms set forth in claim 29.

As per claim 30, Wei and Ikemoto disclose the limitations of claim 21 as described above. Wei also discloses that the transformation module is operable to generate a set of possible device specific or client type specific pages of various sizes and select therefrom. (See Wei, Page 21, paragraph 0259, and Page 22, claim 17).

As per claim 31, Wei and Ikemoto disclose the limitations of claim 21 as described above. Wei also discloses that the target device platform includes any one of a number of heterogeneous device platforms or client types. (See Wei, Page 21, paragraph 0259, and Page 22, claim 17).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wei (U.S. Publication 2003/0200254 A1) and Ikemoto (U.S. Patent 5,969,717) as applied to claim 1 above, and further in view of Kashiwagi (U.S. Patent 6,037,939).

As per claim 3, Wei and Ikemoto disclose the limitations of claim 1 as described above. Wei and Ikemoto do not disclose expressly reducing the size of the graphical user interface components as a function of transformation rules when the display screen is over-filled by the page. Kashiwagi discloses that the size of a graphical user interface component is resized in response to the operable range and size of the overall image. (See Kashiwagi, Column 14, lines 28-44). Wei, Ikemoto, and Kashiwagi are analogous art because they are from the same field of endeavor of creating graphical user interfaces. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the resizing or reducing of a graphical user interface component with the system and method of adapting a presentation to heterogeneous device platforms of Wei and Ikemoto. The motivation for doing so would have been to allow the user to interactively manipulate the data retained in the system including changing a displayed image. (See Kashiwagi, Column 2, lines 44-60). Therefore, it would have been obvious to combine Kashiwagi with Wei and Ikemoto for the benefit of allowing the user to manipulate the data to obtain the invention as specified in claim 3.

Claims 11-20, 22, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wei (U.S. Publication 2003/0200254 A1) in further view of Ikemoto (U.S. Patent 5,969,717), Kashiwagi (U.S. Patent 6,037,939), and Smith (U.S. Publication 2002/0167543 A1).

As per claim 11, Wei discloses a method of dynamically adapting a presentation generated by a scalable application to a display screen of any of a number of

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heterogeneous device platforms. Wei does not disclose expressly providing an intermediate representation including a number of container nodes in a hierarchical configuration, identifying a first container node with the lowest hierarchical level and the highest layout priority in the intermediate representation, arranging on a page at least one graphical user interface component associated with the first container node, applying a transformation rule to reduce the size of the graphical user interface component when the page over fills a display screen of one of the heterogeneous device platforms, and adding at least one graphical user interface component from a hierarchically related container node when the page under fills the display screen.

Ikemoto discloses providing an intermediate representation including a number of container nodes in a hierarchical configuration (See Ikemoto, Figure 15A, and Column 14, lines 26-38). Ikemoto also discloses identifying a first container node with the lowest hierarchical level and the highest layout priority in the intermediate representation (See Ikemoto, Column 9, lines 58-62, and Column 14, lines 48-54).

Ikemoto also discloses arranging on a page at least one graphical user interface component associated with the first container node. (See Ikemoto, Figure 2).

Kashiwagi discloses applying a transformation rule to reduce or change the size of the graphical user interface component when the page over fills a display screen of one of the heterogeneous device platforms. (See Kashiwagi, Column 14, lines 28-44). Smith discloses adding at least one graphical user interface component from a hierarchically related container node when the page under fills the display screen. (See Smith, Page 2, paragraphs 0033 and 0034). Wei, Ikemoto, Kashiwagi and Smith are analogous art



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because they are from the same field of endeavor of creating graphical user interfaces. At the time of the invention it would have been obvious to a person of ordinary skill in the art to includes the intermediate representation including container nodes of Ikemoto, the transformation rule to change the size of a graphical user interface component of Kashiwagi, and the addition of graphical user interface components of Smith with the method of dynamically adapting a presentation generated by a scalable application to a display screen of any of a number of heterogeneous device platforms of Wei. The motivation for doing so would have been to identify the degree of importance of each item (See Ikemoto, Column 14, lines 22-24), to allow the user to interactively manipulate the data retained in the system including changing a displayed image (See Kashiwagi, Column 2, lines 44-60), and to allow for updates to the content of the container or frame of the graphical user interface (See Smith, Page 2, paragraph 0033). Therefore, it would have been obvious to combine Ikemoto, Kashiwagi and Smith with Wei for the benefit of providing and manipulating graphical user interface components stored in an intermediate representation to obtain the invention as specified in claim 11.

As per claim 12, Wei, Ikemoto, Kashiwagi and Smith disclose the limitations of claim 11 as described above. Wei also discloses selecting an appropriate transformation rule as a function of at least one of the graphical user interface components and capabilities of different device platforms or client types. (See Wei, Page 2, paragraph 0012).

As per claim 13, Wei, Ikemoto, Kashiwagi and Smith disclose the limitations of claim 11 as described above. Wei also discloses that the transformation rule is applied

as a function of a ranking indicating the degree of general applicability of the transformation rule to the heterogeneous device platforms or client types. (See Wei, Page 5, Table 1 – continued, “Nexel Server Kernel”).

As per claim 14, Wei, Ikemoto, Kashiwagi and Smith disclose the limitations of claim 11 as described above. Wei also discloses generating a list of possible graphical user interface components sorted by size (See Wei, Figure 6, and Page 7, paragraph 0130), selecting a graphical user interface component from the list (See Wei, Page 7, paragraph 0130), and interchanging the graphical user interface component arranged on the page with the graphical user interface component from the list (See Wei, Page 7, paragraph 0130).

As per claim 15, Wei, Ikemoto, Kashiwagi and Smith disclose the limitations of claim 11 as described above. Wei also discloses transforming a graphical user interface component to a graphical user interface component that is specific to one of the heterogeneous device platforms or client types. (See Wei, Page 7, paragraph 0130).

As per claim 16, Wei, Ikemoto, Kashiwagi and Smith disclose the limitations of claim 11 as described above. Wei also discloses transforming a composite graphical user interface component including a number of graphical user interface components associated with a container node to a composite graphical user interface component specific to the heterogeneous device platform or client type. (See Wei, Page 22, claim 20).

As per claim 17, Wei, Ikemoto, Kashiwagi and Smith disclose the limitations of claim 11 as described above. Wei also discloses selecting a container node that is one of a hierarchical sibling or related higher-level container node. (See Wei, Figure 9).

As per claim 18, Wei, Ikemoto, Kashiwagi and Smith disclose the limitations of claim 11 as described above. Wei also discloses repeating the transformation of a composite graphical user interface component including a number of graphical user interface components associated with a container node to a composite graphical user interface component specific to the heterogeneous device platform or client type. (See Wei, Page 22, claim 20).

As per claim 19, Wei, Ikemoto, Kashiwagi and Smith disclose the limitations of claim 11 as described above. Wei also discloses identifying a container node with at least one graphical user interface component as a hierarchical child (See Wei, Figure 9).

As per claim 20, Wei, Ikemoto, Kashiwagi and Smith disclose the limitations of claim 11 as described above. Ikemoto also discloses laying out the graphical user interface components on the page as a function of the hierarchical configuration and constraints specified within the application graphical user interface. (See Ikemoto, Figure 2). Wei, Ikemoto, Kashiwagi and Smith are analogous art because they are from the same field of endeavor of creating graphical user interfaces. At the time of the invention it would have been obvious to include the layout of graphical user interface components as a function of the hierarchical configuration and constraints specified in the application of Ikemoto with the method of dynamically adapting a presentation

generated by a scalable application to a display screen of any of a number of heterogeneous device platforms of Wei, Ikemoto, Kashiwagi and Smith. The motivation for doing so would have been to include graphical user interface components that allow users to select one of a number of possibilities. (See Ikemoto, Column 2, lines 11-13). Therefore, it would have been obvious to combine Ikemoto with Wei, Ikemoto, Kashiwagi and Smith for the benefit of allowing the user to utilize graphical user interface components incorporating the selection of a number of possibilities to obtain the invention as specified in claim 20.

Claim 22 is rejected on the same basis as claim 11.

Claim 25 is rejected on the same basis as claim 15.

Claims 26 and 27 are rejected on the same basis as claim 16.

Claims 4-6 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wei (U.S. Publication 2003/0200254 A1) and Ikemoto (U.S. Patent 5,969,717) as applied to claims 1 and 21 above, and further in view of Smith (U.S. Publication 2002/0167543 A1).

As per claim 4, Wei and Ikemoto disclose the limitations of claim 1 as described above. Wei and Ikemoto do not disclose expressly selecting alternative graphical user interface components as a function of transformation rules when the display screen is over-filled by the page. Smith discloses changing the user interface tools when the context or size of the display is changed. (See Smith, Page 2, paragraphs 0033 and 0034). Wei, Ikemoto, and Smith are analogous art because they are from the same

field of endeavor of creating graphical user interfaces. At the time of the invention it would have been obvious to include the changing of user interface tools or components of Smith with the system and method of dynamically adapting a presentation generated by a scalable application to a display of any of a plurality of heterogeneous device platforms of Wei and Ikemoto. The motivation for doing so would have been to allow for updates to the content of the container or frame of the graphical user interface (See Smith, Page 2, paragraph 0033). Therefore, it would have been obvious to combine Smith with Wei and Ikemoto for the benefit of allowing updates to the content of the container or frame of the graphical user interface to obtain the invention as specified in claim 4.

As per claim 5, Wei and Ikemoto disclose the limitations of claim 1 as described above. Wei and Ikemoto do not disclose expressly adding graphical user interface components to the page as a function of the hierarchical configuration when the display screen is under-filled by the page. Smith discloses changing the number of user interface tools or components in response to a change to the context or size of the frame or container. (See Smith, Page 2, paragraphs 0033 and 0034). Wei, Ikemoto, and Smith are analogous art because they are from the same field of endeavor of creating graphical user interfaces. At the time of the invention it would have been obvious to include the changing of user interface tools or components of Smith with the system and method of dynamically adapting a presentation generated by a scalable application to a display of any of a plurality of heterogeneous device platforms of Wei and Ikemoto. The motivation for doing so would have been to allow for updates to the

content of the container or frame of the graphical user interface (See Smith, Page 2, paragraph 0033). Therefore, it would have been obvious to combine Smith with Wei and Ikemoto for the benefit of allowing updates to the content of the container or frame of the graphical user interface to obtain the invention as specified in claim 5.

As per claim 6, Wei and Ikemoto disclose the limitations of claim 1 as described above. Wei and Ikemoto do not disclose expressly repeating providing a number of graphical user interface components in a hierarchical configuration, arranging the graphical user interface components on a page as a function of the hierarchy, and selectively transforming the graphical user interface components to adjust the size of the page to maximize the fill of a display screen of one of the heterogeneous device platforms or client types on which the scalable application is operating. Smith discloses a set of layouts that repeat the above-mentioned steps. (See Smith, Page 3, paragraph 0039). Wei, Ikemoto, and Smith are analogous art because they are from the same field of endeavor of creating graphical user interfaces. At the time of the invention it would have been obvious to include the repetition of the above mentioned steps of Smith with the system and method of dynamically adapting a presentation generated by a scalable application to a display of any of a plurality of heterogeneous device platforms of Wei and Ikemoto. The motivation for doing so would have been to allow the layouts to be stored for use on the various device platforms to which they apply. (See Smith, Page 3, paragraph 0039-0040). Therefore, it would have been obvious to include Smith with Wei and Ikemoto for the benefit of storing the various layouts for future use to obtain the invention as specified in claim 6.

Claim 24 is rejected on the same basis as claim 4.

Claims 7 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wei (U.S. Publication 2003/0200254 A1) and Ikemoto (U.S. Patent 5,969,717) as applied to claims 1 and 21 above, and further in view of Abdelnur (U.S. Patent 6,429,882 B1).

As per claims 7 and 28, Wei and Ikemoto disclose the limitations of claims 1 and 21 as described above. Wei and Ikemoto do not disclose expressly applying a set of style guide parameters to each of the graphical user interface components to create uniformity in the visual appearance of the graphical user interface components. Abdelnur discloses the use of a designated style guide to provide a common look, feel, and usage to the layout of a graphical user interface. (See Abdelnur, Column 2, lines 57-61). Wei, Ikemoto and Abdelnur are analogous art because they are from the same field of endeavor of creating graphical user interfaces. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the style guide of Abdelnur with the system and method of dynamically adapting a presentation generated by a scalable application to a display of any of a plurality of heterogeneous device platforms of Wei and Ikemoto. The motivation for doing so would have been to provide for a common look, feel and usage among components of the graphical user interface. (See Abdelnur, Column 2, lines 57-61). Therefore, it would have been obvious to combine Abdelnur with Wei and Ikemoto for the benefit of providing

uniformity among graphical user interface components to obtain the invention as specified in claims 7 and 28.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Wugofski (U.S. Patent 6,317,143 B1) discloses a programmable graphical user interface control system and method.
- Nulu (U.S. Patent 6,650,347 B1) discloses a hierarchical GUI representation for web based network management applications.
- Gasser (U.S. Patent 6,636,250 B1) discloses providing a graphical user interface that can use a hierarchical form or style of presentation to depict and display hierarchical and non-hierarchical relationships and objects.
- Rosen (U.S. Patent 6,097,382) discloses a method and apparatus for building an application interface
- Miyashita discloses the interactive generation of graphical user interfaces using multiple visual examples
- Rist discloses three different systems that address the integration of mobile communication terminals into multi-user applications

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurie Ries whose telephone number is currently

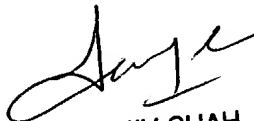


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(703) 605-1238. After mid-October, 2004, the examiner can be reached at (571) 272-4095. The examiner can normally be reached on Monday-Friday from 7:00am to 3:30pm.

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LAR

  
SANJIV SHAH  
PRIMARY EXAMINER